Abstract

Throughout the history of medicine, patient-doctor relationships remained intimate and were based on the patient’s expectations, which were more or less limited by the expert knowledge of the physician. At first, the economic relationship between patient and doctor was based on a personal agreement; state regulations were only involved later. In Roman times the relationship was affected indirectly by the state, mostly by the adoption of the Act on Hygiene and partly by various social-economic regulations. However, in the early Middle Ages, the charitable activities undertaken by the monastic population, with their limited medical knowledge, proved to be a backward step in the development of the healthcare system. It was not until the development of medical knowledge at the emerging universities, especially during the Renaissance, that regulations re-entered healthcare and the better education of physicians marked the new era. During the investigated period

Izvleček

Odnos bolnik – zdravnik je bil skozi vso zgodovino medicine intimne narave. Temeljil je na pričakovanjih bolnika, ki so bila več ali manj omejena s strokovnim znanjem zdravnika. Ekonomsko razmerje med njima je v začetku temeljilo na dogovoru, šele kasneje se je v ta odnos pričela vključevati tudi država s svojo regulativno. V rimski dobi je bilo to posredno, predvsem s higiensko zakonodajo, deloma tudi različnimi socialno – ekonomskimi predpisi. V zgodnjem srednjem veku je karitativna dejavnost samostanske medicine z na žalost omejenim medicinskim znanjem, predstavljala korak nazaj v razvoju zdravstvenega sistema. Šele z razvojem medicinskega znanja na nastajajočih univerzah, predvsem v času renesanse, so predpisi znova posegali na področje zdravstvene dejavnosti, bolšje izobraževanje zdravnikov pa je postalo znanilec novih časov. V raziskovanem obdobju (od razsvetljenske dobe do II. svetovne vojne) se je drža-
Maria Theresa reigned from 1740 to 1780 and was very adept at selecting her advisers. One of her main advisers in the field of economics was Joseph von Sonnenfels, a representative of mercantile and public finance economic theories, who advocated population growth as one of the most important factors for economic strength and national development. Indirectly, he promoted higher birth rates and reduced mortality rates. The mortality of newborns and small children was particularly distressing and was reflected in short life spans.

The population’s state of health needed to be improved in order to achieve a longer life expectancy. Hence, health reforms were essential. Gerard van Swieten, born in Leiden, Holland (1700–1772) was the empress’s adviser in this field. As a knowledgeable physician, he implemented numerous reforms, of which the General Norm of Health Services and the Pest Control Regulations were the most important. Both were implemented in 1770 (1, 2).

Gerard van Swieten was introduced to the Emperor’s family in Holland, where Maria Ana—the sister of Maria Theresa—gave birth in 1740. Since he was a pupil of Herman Boerhaave, he was sent to Brussels to help her deliver the baby, which he did so successfully. A year after that Empress Maria Theresa appointed him as her adviser (3).

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**GENERAL NORMATIVUM IN RE SANITATIS AND THE PEST REGLEMENT**

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ry training of physicians, wound surgeons, surgeons, pharmacists and midwives for the entire monarchy. In addition, van Swieten implemented controls over the work of physicians and defined every main task of the health protection services (4).

The second Act on the Plague included provisions on plague prevention based on Adam Chenot’s (1721–1789) experience. In Transylvania, he realised that fleas, as well as rats, carry the risk of disease transmission (5).

However, some epidemiological measures were already practiced prior to these findings. For passengers travelling from the East, a sanitary cordon was implemented in 1731 at the Military Frontier. Similar quarantine-like measures were adopted in harbours, like Venice. The Contumex und respective Reinigungs Ordnung (1731), and particularly the Pest Reglement, 40 years later, enacted protective measures regarding the spread of infectious diseases (6).

The Military Frontier was located on the border with the Ottoman Empire and ranged almost 2,000 kilometres from Senj on the Adriatic Coast to the Carpathian Mountains. It was created in the 16th Century to act against incursions from the Ottoman Empire. In some parts it was guarded by fortifications or border garrisons and numerous military barracks where health protection measures were performed, which prevented infectious diseases from being transferred to the Austrian Empire and further into Europe. Passengers travelling from the East had to take off all their clothes and take a bath at the checkpoint. Their underwear and clothes were fumigated, washed, boiled and ironed. Sick individuals, or those suspected of being sick, remained in the quarantine stations for 10 to 84 days. This health protection work was inspected by wound surgeons and sometimes by physicians. This sanitary cordon was in operation until 1872 (6).

Van Swieten realised that medical education at medical faculties based on Hippocratic and Galenic principles needed to be reformed. The enlightened absolutism of Maria Theresa and her son Joseph II facilitated the introduction of the reforms that were variously enacted in different European countries at that time. In France, the bourgeois revolution made a major contribution with its principles of equality. In England, education was based on bedside practice; however, the research tradition in universities since the time of William Harvey was also not neglected. In the German-speaking countries, particular Austria, reforms were enacted in a compulsory manner.

Van Swieten ensured that the faculties retained their right to issue permits to practice medicine (venia practicandi); however, the dean was subordinated to the study director, who was a state official. His duty was to exercise control over examinations and lectures. Hence, the role of the dean was clearly subordinated and in the period between 1780 and 1791 the dean of the medical faculty in Vienna was not elected. Van Swieten himself assumed the position of study director. In this way, medical study in Vienna and Prague, as well as in other crown lands, was reformed. The diploma of the medical faculty was valid throughout the monarchy. However, those who received their permits at other Austrian faculties or universities could practice medicine only in certain regions, mostly in their own province. In addition, van Swieten carefully selected examiners and the subject matter of the oral examinations (doctoral vivae) (7).

In addition to medical faculties, a medico-surgical study programme based on the General Norm of Health Services (Generale Normativum in Re Sanitatis) was introduced to educate wound surgeons and obstetricians. Candidates from Lower Styria mostly received their education in Graz, where a medico-surgical school had existed since 1782. For almost 80 years, this institution provided surgeons for the entire Styria region. Based on the protocol of the board of surgeons of the Maribor district in the period from 1776 to 1867 it can be concluded that they were qualified to work as medical practitioners in urban and especially suburban areas (8). By introducing this kind of education, healthcare was substantially improved.
Van Swieten encroached on the health system’s organisation with his new ideas. Thus, he established a public hospital, a foundling hospital and a mental institution in Vienna. These became role models for the entire monarchy. During the last decades of the 18th century, hospitals were first established in the centres of the country and later on in other larger towns as for example Maribor. Today this hospitals form the backbone of the health system (9).

Reforms recommended by the excellent Dutch clinician Anton de Haen (1704–1776) encroached on the field of clinical practice. Bedside education became mandatory, physicians started to measure and record patients’ temperatures (one of the crucial symptoms) and autopsies of patients who died during their stay in hospital were obligatory. Clinical work was much improved. Present historians refer to this period as the “first Viennese school”. It is distinguished from the “second Viennese school”, when the scientific linking/integration of clinical examinations with post-mortem examinations began (3).

HEALTH INSURANCE IN SLOVENIA

The healthcare needs of the population, frequent injuries, increasing industrialisation and disabilities among working people generated the idea of a solidarity-based health insurance system. The early origins of this insurance lay in the fraternal funds established by mine workers (e.g., in Idrija in 1771) and by various mutual aid associations. In the Duchy of Carniola, a relief and sick fund association was established for mercantile and healthcare workers in 1835. Workers and craftsmen demanded greater social security in emerging industrial centres, which offered a more vigorous development of voluntary health insurance in the second half of the 19th century. The adoption of the Miners Act in 1854 introduced the so-called fraternal funds for mine workers that provided insurance with an obligation for the mine workers to pay contributions for their potential needs during sickness (10). In the Trbovlje Coalmine Company a powerful fraternal fund was established; in the initial phase this fund took care of the miners and a certain amount of social security was provided later for their family members as well. This marked the beginning of reciprocity principles. Moreover, the funds received their own statutes and membership was mandatory.

The Crafts Act was passed in 1859; its abolition of the manufacturing guild methods and introduction of industrial liberalism had a very positive effect. This act introduced social security for craftsmen and featured provisions on work inspection, worker protection and occupational safety in the amendment of 1883 (11). Similar, but enhanced, insurance against injury was extended to railway workers in 1869. Furthermore, a sickness fund of the workers’ educational association and a general workers’ provident society for Carniola were also established.

The beginnings of health insurance

Compulsory insurance against injury was enacted in the Austrian part of the Hapsburg monarchy through the Act on Compulsory Insurance adopted in 1887, followed by the Act on Sickness Insurance, published in 1888 (12, 13). The Hungarian part of the monarchy introduced similar regulations in 1891, so the inhabitants of the Prekmurje region—Hungarian Slovences, as they were also called—were insured as well. In addition, in 1889 the Act on Fraternal Funds regulated voluntary health insurance and distinguished between sickness and accident insurance (14). The amended act of 1895 further regulated the mandatory rest days on Sundays and holidays.

Sickness insurance formed the basis of the system. Members were insured against sickness (sickness insurance), as well as debilitation, disability, old age and death (pension provision insurance). Two funds, from which the compensation was paid, were clearly separated from each other. There was no special insurance covering work-related accidents, except for total disability or death. In such circumstances, the compensation was collected from the provision fund and temporarily or partially from the sickness fund (payment of treatment). District sickness funds with their district head offices formed the basis of the Act on Sickness Insurance. The first “district sick-
ness fund”, which followed the Bismarckian model, was founded in Ljubljana in 1889 and was quickly followed by other sickness funds (15). There were 16 new establishments in Carniola, 42 in Styria and 12 in the Primorska region; all together they insured more than 61,000 people. However, the majority of the population was still not insured. Sickness funds continued operating successfully until the Austro-Hungarian monarchy collapsed at the end of the First World War (16).

Sickness funds for craftsmen formed an additional kind of sickness insurance. At the end of 1889, 17 were established in Carniola, 32 in Styria, and a total of 1323 throughout the whole of Austria, with approximately 12,500 members (17). The third kind of insurance was the so-called sickness funds of associations, which was of less importance. In Slovenia, this kind of insurance was established in Tržič, Upper Carniola (16).

Accident insurance that was strictly distinguished from sickness insurance began to be implemented on the basis of the Act on Accident Insurance (1887). Accident insurance was to be established in every crown land but only seven were founded. By introducing this measure the government aimed to expand the insurance basis (portfolio) and to increase the number of insured persons. This resulted in the formation of an insurance company for Styria and Carinthia in Graz, and another one in Trieste for Carniola, Istria, the Primorska region and Dalmatia, with a total of about 134,000 insured persons (18).

Social and pension insurance for workers was a different insurance system that emerged later. Setting the basis of old-age insurance in the period from 1907 to 1910 was a big step forward. To implement this insurance, the government committed to contributing 90 million crowns annually in the first three-year period and a minimum of 60 million crowns in the following years. Provisions for the protection of workers and craftsmen (1902), the basis of the collective agreement (1907) and the Act on Housing and Welfare (1910) introducing a housing fund formed the legal basis for social and pension insurance. However, these acts were not generally adopted, so it was only mostly miners, railway workers and civil servants who had pension insurance (2/3 of the insurance was paid by the workers and 1/3 by their employers). However, unemployment insurance, which began to be brought into force in Great Britain in 1911, was not yet implemented in Slovenia. The programme was not realised due to the First World War and the collapse of the Austro-Hungarian monarchy.

Healthcare insurance after World War I
The national government of the State of Slovenes, Croats and Serbs, formed on 29 October 1918, founded a Committee for Social Welfare. The committee dissolved all the existing sickness funds and merged them on 1 January 1919 into a uniform District Sickness Fund for Slovenia in Ljubljana. It was several years before the practical execution of the unification of the insurance system was finally completed (20).

Accident insurers with head offices (Trieste, Graz) outside the State of Slovenes, Croats and Serbs presented a larger issue. Therefore, the Provincial Government established a temporary labour insurance company for accidents in Ljubljana on 8 December 1918 that covered the insurance of labourers, miners and railwaymen. However, in 1920, the railwaymen branched off with their insurance and Slovenia had three healthcare insurance companies as follows:

- a district sickness fund for Slovenia in Ljubljana
- a temporary labour insurance company
- a temporary railway insurance company for accidents (21).

Act on the insurance of workers
The conditions of the time were regulated with the Act on the Insurance of Labourers (1922). Based on this act, the Central Office for Workmen’s Insurance became the carrier of social insurance in Zagreb (21).

A district office, based in Ljubljana, was established for Slovenia. The central office provided insurance for disease, work accidents and in cases of helplessness, old age and death. The district office supervised the employers regarding reports of accidents, deaths,
etc. The office kept records of insurance holders, collected contributions, provided treatment at outpatient clinics and benefit payments. The district office in Ljubljana was the largest and most financially successful in Yugoslavia; whereas, in Slovenia, the most important was the labour social institute with offices in all the larger towns: Maribor, Celje, Ptuj, Murska Sobota, Slovenj Gradec, Zaborje ob Savi, Novo mesto, Kočevje, Kranj and Tržič. The institute used the collected money for sickness benefits, hospital treatment, doctors and medication. The office also had its own outpatient clinics as well as physicians at factory clinics. The office also had accident stations and consultation rooms for mothers with children, a bathing area, a sanatorium for lung patients and patients with bone tuberculosis and anti-tuberculosis clinics. In addition to its own office buildings in Ljubljana, Kranj, Celje and Maribor, the office also owned several residential and other office buildings. It joined all three sickness funds and Adolf Golja became its first head. By doing so, the conditions were created for further development in the legislative area. The temporary regulations on labour insurance for diseases and accidents (June 1921) and the regulation on helplessness, old age and death (December 1921) were repealed (19).

The Ministry for Social Policy and National Health provided control over the ongoing operations. Membership was compulsory and uniform. All workers and postholders were insured. Miners and railwaymen continued to have their own system but certain craftsmen and farmers mostly remained uninsured (19).

During this period, an investment loan agreement was concluded for the construction of a building for the insurance company on Miklošičeva Street in Ljubljana and construction began in 1925. It was similar in Maribor, where the construction of the building was completed in 1932 in Sodna Street. In Celje, the insurance company obtained new premises at Narodni dom (22).

The social security system was administered through relatively independent social security institutions with their own resources for financing that were provided by workers and employers. Because of the large differences in the level of economic and social development between the former State of Slovenes, Croats and Serbs (Austrian part) and the Kingdom of Serbia, the implementation of the act was problematic. The act anticipated the implementation of regulations on helplessness, old age and death after 1925, but due to differences and delays by the Belgrade government, the regulation began to be implemented only after 1937.

Just before World War II, pension and healthcare insurance was implemented for workers (state officials were in a better position as they had insurance stemming from the Austro-Hungarian Empire). The rest of the residents mostly remained uninsured after this period (23).

Even the 6 January Dictatorship and changes in 1930 in the field of healthcare legislation did not bring about any new initiatives. New initiatives were introduced in the field of healthcare (organisation of healthcare services, hospitals, pharmacies, prevention of infections etc.) [Author: Presumably the word “novelties” can be referred to as “new initiatives”. If so, it seems that a date is required for the new initiatives introduced. You say that there were no new initiatives in 1930 but then refer to a number of new initiatives so these must have been in some later year.] Slovenia became (without the Primorska and Bela Krajina regions) a unit of the Kingdom of Yugoslavia called The Drava Banovina and had a relatively well developed healthcare system (24).

HEALTHCARE ORGANISATION

Very simple healthcare practices, which are taken for granted today, required long social development. The legislation and organisation of the healthcare system required a change in the socio-political mentality, different socio-economic measures, the development of medicine, and, in particular, a different organisation of the healthcare services.

Austrian health regulations at the beginning of the 19th century (after the departure of the French) were relatively unmanaged in the form of different legal
acts and regulations. The managed criteria for employing medical staff—physicians, wound surgeons, midwives, and pharmacists—regulated the incomes of physicians and other medical staff and managed the manner of prescribing drugs and physicians’ practical work. In the case of deaths, the regulation prescribed a post-mortem examination and burial of the dead. The regulations partially defined the state of apparent death and necessary resuscitation. The regulations also stipulated the management of medical records, including conscript records, and introduced numerous epidemiological measures to control infectious diseases (*Normativum in Re Sanitatis, Pest Reglement*) (25).

**Austrian Sanitary Act**

The new Tsarist Rulers Act on managing public healthcare services, adopted on 30 April 1870, comprehensively managed the general healthcare services and public healthcare of the then existing Austria (25). It was popularly called the Sanitary Act. It specified the tasks of the state administration regarding:

- records and work of healthcare staff
- control over the work of healthcare institutions (hospitals, orphanages etc.)
- prevention and control of infectious diseases
- management of marketing authorisation for medicinal products and poisons
- control over post-mortem examination services
- management of medical and police autopsies
- control over the work of the healthcare police, which was under the authority of the municipalities.

The Supreme Healthcare Advisory Council was the highest healthcare authority at the Ministry for Internal Affairs and was directly subject to the instructions and measures of the Internal Affairs Minister. The act also defined the organisation of healthcare services at the provincial level so that the provincial board was responsible for establishing the provincial healthcare advisory council with a provincial healthcare clerk and a provincial doctor for animals. The tasks of the provincial healthcare board were specifically laid down in the act, including the composition of the board, the length of the members’ mandate and the manner of payment (the function was mostly not paid). The act also imposed healthcare measures at the municipality level; it required the creation of a healthcare police force and laid down its tasks. The healthcare police were responsible for hygiene and epidemiological measures as well as measures regarding the prevention of infectious diseases and raising healthcare awareness among the inhabitants. The municipality was the primary carrier of the healthcare organisation and the act anticipated that several minor municipalities could merge into a healthcare district. In this case, individual municipalities had a healthcare representative on the district level body. The district itself appointed the district physician, who was appointed by decree on the basis of a public tender (25).

The borders of the healthcare districts were usually consistent with the court districts. The tasks of the municipalities or the districts were specified in the service instructions or decisions, which were published on 16 March 1889 for Carniola. The foundation for this decision was the Provincial Act, which was declared in the Carniola region in 1888 and in Styria in 1892 (25).

The act specified the duties of district physicians and was divided into three parts:

- The first part specified the names of districts with the residences of the district physicians.
- The second part contained service instructions for physicians performing tasks at the level of prevention, monitoring of other services, managing the medical statistics and the monitoring of post-mortem services not performed by medical practitioners (unless a murder was suspected, in which case the examination had to be performed by the physicians). They were also responsible for providing care for abandoned children, deaf people, the insane and ill paupers.
- The act also laid down the surgical equipment used for surgery and deliveries as well as the care needed for the domestic pharmacy. The third part also laid down the tariffs for services performed by physicians in the public healthcare service.
Individual larger towns were excluded, as they had to organise their healthcare services independently with the help of all their authorities, especially the district centres (Graz, Ljubljana), where the organisation was directly dependent on the provincial legislation (26).

**Healthcare legislation after World War I**

The Austrian legislation (Act on the Medical Service from 1870, provincial acts and healthcare decisions) was passed on to the newly founded State of Slovenes, Croats and Serbs, despite its disintegration in 1918. It remained valid until the introduction of the 6 January Dictatorship in 1929 or 1930, respectively. [Author: It is not clear why the dictatorship can be dated 1929 or 1930. Reference sources seem to date it as 1929.] On the disintegration of Austria, the provincial government in Ljubljana established a healthcare division for Slovenia, which was renamed, after a decree by the Belgrade government, the Healthcare Council for Slovenia and Istria. The hospitals were thereby brought under state administration (27).

The amendments to the legislation on the protection of workers against accidents and illnesses (see the section on healthcare insurance) and the Acts on Work Inspection and the Protection of Children were adopted between 1921 and 1922 (28, 29).

Among the rules regulating the field of healthcare, there was also a decision on helplessness, old age and death from 1921, whereby the execution of the mentioned legislation was delayed until after the introduction of the Act on Labour Protection in 1925. In practice, the implementation of these acts was delayed for a whole 12 years. Right before the introduction of the 6 January Dictatorship in 1929, another decision was adopted on healthcare education (30).

Systematic regulation of social legislation was defined in the Kingdom of Yugoslavia by the Act on Subdivisional Administration (7 November 1929) and the Act on the Structure of Social and Healthcare Administration (20 March 1930) (30, 31). Several other acts were adopted in the same year for the operation of the healthcare system at the municipality level:

- Act on Healthcare Municipalities, which had additional rules that introduced the concept of a municipality physician with specifically defined tasks
- Act on Healthcare Cooperative Societies
- Act on Supporting Village Sanctions
- Act on Healthcare Protection of Students
- Act on Combating Infectious Diseases
- Act on Pharmacies
- Act on Marketing Narcotic Drugs and Poisons
- Act on Physicians
- Act on Physicians – Specialists for Diseases of the Mouth and Teeth as well as Dental Technicians
- Act on Technical Colleges (32, 33, 34, 35, 36, 37, 38, 39, 40, 41).

The new legislation also enabled a reorganisation of the healthcare system. The Ministry for National Health of the State of Slovenes, Croats and Serbs had four departments: administrative, hospital, hygiene and population, and a housing censuses department. Educating people was especially important, as the population were poorly educated. The programme for educating the population introduced a new discipline called social medicine. The content and development of this new discipline took two directions and was strongly associated with the existing concept of hygiene. Performing preventive measures and monitoring the healthcare state of the entire society used the hygiene section of the League of Nations and the Rockefeller Foundation as a role model. Institutes began to form based on these hygiene models (42). The Central Hygiene Institute was founded in Belgrade in 1927 and the School of National Health was founded in the same year in Zagreb (43).

By the end of the year, all nine subdivisions had founded hygiene institutes, which represented the foundation for preventive healthcare services across the state. Their main task was to establish hygiene, epidemiological and preventive services in their own field of work. In 1940, the then Yugoslavia had 538 independent healthcare institutions of different types (hygiene institutes, health centres, medical posts, bacteriological institutes, school polyclinics, baby clinics and anti-tuberculosis and dermatovenerological clinics). At the same time, approximately 170 hospitals with around 23,000 hospital beds were available (42).
REFERENCES

6. Contumaz und respective Reinigungs Ordnung, Vienna, adopted in 1731.
25. Das Reichssanitätsgesetz, passed on 30 April 1870.
27. Act on Work Inspection, adopted on 30 December 1921.
43. Decision by the Central Hygiene Institute in Belgrade. Službene novine, 21 December 1929, No. 299/CXXV.